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Thursday, 28/05/2009 11:50:30 AM User: Chantal Lavoie **Process Sheet** Customer : CU-DAR001 Dart Helicopters Services : TUBE **Drawing Name** Job Number : 48281 **Estimate Number** : 11175 P.O. Number **Part Number** : D22825 : 28/05/2009 S.O. No. : : D2282 REV E This Issue **Drawing Number** Prsht Rev. : NC : N/A **Project Number** : // : MACHINED PARTS : E First Issue Type **Drawing Revision** : 46429 **Previous Run** Material : 04/06/2009 **Due Date** Qty: Written By Checked & Approved By I Comment Est Rev:A Removed from 9 Digit 05-12-02 JLM EstRev:B Now on Doosan Lathe 08-06-05 JLM Verified By:EC **Additional Product** Job Number: Seq. #: **Machine Or Operation:** Description: M304RO750 1.0 304 SS Roundbar .750 Comment: Qty.: 0.1891 f(s)/Unit Total: 9.4532 f(s) Material: AISI 304 Stainless Steel Ø0.750(M304R0.750) Batch 1/1/323 DOOSAN LATHE DOOSAN LATHE 2.0 Comment: DOOSAN LATHE 1-Turn as per Dwg D2282 and Folio FA189 2-Deburr INSPECT PARTS AS THEY COME OFF MACHINE 3.0 QC2 Comment: INSPECT PARTS AS THEY COME OFF MACHINE 4.0 QC8 SECOND CHECK

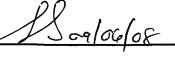
Comment: SECOND CHECK

PACKAGING 1

Comment: PACKAGING RESOURCE #1

Identify and Stock Location:

PACKAGING RESOURCE #1





5.0

Dart Aerospa	ce	Ltd
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W/O: WORK ORDER CHANGES																					
DATE	STEP PROCEDURE CHANGE		STEP PROCEDURE CHANGE		STEP PROCEDURE CHANGE By		STEP PROCEDURE CHANGE By		STEP PROCEDURE CHANGE By		PROCEDURE CHANGE By		PROCEDURE CHANGE By Da		EP PROCEDURE CHANGE By Date		STEP PROCEDURE CHANGE By		Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No:	PAR #:	Fault Category:	NCR: Yes No DQA:	Date:
Resolution:		Disposition:	QA: N/C Closed:	Date:

NCR:	NCR: WORK ORDER NON-CONFORMANCE (NCR)							
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DATE	STEP	Section A	Initial Chief Eng			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Date:

Thursday, 28/05/2009 11:50:30 AM

User: 4

Chantal Lavoie

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE

Job Number: 48281

Part Number: D22825

Job Number:



Seq. #:

Machine Or Operation:

Description:

6.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

mf 09-00-08

Job Completion



W/O: WORK ORDER CHANGES								
DATE	STEP	PR	OCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	:	PAR #:	Fault Category:	NCR: Yes	No DQ	 A:	Date:	
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NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
		Description of NC		Corrective Action Section B		Verification	·	
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector
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DART AEROSPACE LTD	Work Order:	4878
Description: Handle Tube	Part Number:	D2282-5
Inspection Dwg: D2282 Rev: E		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

	X	First Article		Prototype
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Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
2.17	+/-0.030	2,150				
R0.063	+/-0.010	2.063				
0.063	+/-0.010	.063				
0.125	+/-0.010	125				
0.090 x 45°	+/-0.010	,090×48°				
R0.350	+0.010/-0.000	R.350				
0.158	+/-0.010	, 158				
Ø0.386	+0.005/-0.000	-388		_		
Ø0.700	+/-0.010	.700				
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Measured by:	Audited by:	J.L.,	Prototype Approval:	N/A
Date: 09.06.04	Date:	09/06/05	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	03.11.11	New Issue P/O D350-615-041	KJ/RF	
В	05.04.19	Dimensions & tolerances changed	KJ/JLM	
С	06.03.15	Dimensions & tolerances revised per Dwg Rev E	KJ/JLM , ,	N.
D	07.11.26	Ø0.700 dimension added	KJ/EC/DD 🚜	<u>A</u>

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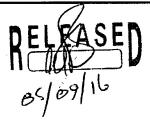
W/O:		WORK ORDER CHANGES						
DATE	STEP PROCEDURE CHANGE			Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
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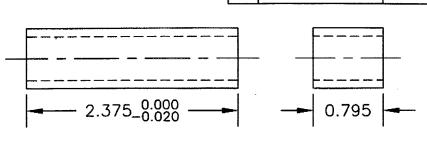
Part No:	PAR #	!:	Fault Category:	NCR: Yes No DQA: _	Date:	
	Resolution:		Disposition:	QA: N/C Closed:	Date:	

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	OTED	Description of NC	Corrective Action Section B			Verification			
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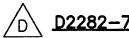
DESIG	BW	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECK	P	APPROVED I	DRAWING NO. REV. E D2282 SHEET 1 OF 2
DATE		1	TITLE SCALE
05.0	6.07	Street and the Collection of t	HANDLE TUBES 1:1
Α		94.10.14	NEW ISSUE
В		95.03.23	RE-DESIGN
С		97.10.20	CORRECTED NUMBERING SCHEME
D		05.03.16	REDESIGN D2282-5; 0.795 WAS 0.750
Ε		05.06.07	D2282-5 304 SS WAS 303 SS; R0.063 x 0.063 WAS R0.080 x 0.030





Ø0.675 (REF) Ø0.493 (REF)

D2282-3



D2282-3/-7 TUBE:

- 1) MATERIAL: T304/T316 3/8 SCHEDULE 40 (REF. DART SPEC. M304TR0.675W.091)
- 2) BREAK ALL UMARKED SHARP EDGES 0.005 TO 0.010
- 3) ALL DIMENSIONS ARE IN INCHES

4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED R0.063 x 0.063 DEEP 4 $0.090 \times 45^{\circ}$ 0.95 -CHAMFER 0.158 Ø0.700 R0.350 -Ø0.386 0.125 $0.080 \times 45^{\circ}$ (REF) **CHAMFER** SHOP COPY 2.17 **RETURN TO ENGINEERING** D2282-5 UNCONTROLLED COPY SUBJECT TO AMENDMENT

D2282-5 STEM:

- 1) MATERIAL: AISI 304 STAINLESS STEEL (REF. DART SPEC. M304R0.750)
- 2) BREAK ALL UMARKED SHARP EDGES 0.005 TO 0.010
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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Dart Aerospace Ltd

W/O:

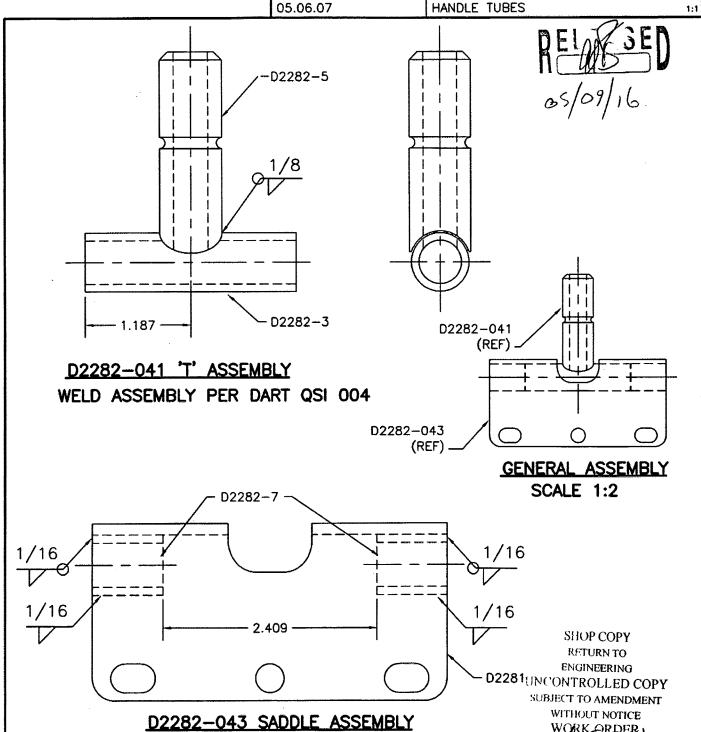
DATE	STEP		PRO	OCEDURE CHANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:		PAR #:	Fault Category:	NCR	R: Yes	No DQ	A :	Date:	
	R	lesolution:		Disposition:	QA:	N/C (Closed:		Date:	

WORK ORDER CHANGES

NCR:			WORK ORDER NON-CONFORMANCE (NCR)							
		Description of NC	Corrective Action Section B			Verification				
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspecto		



DESIGN BW	DRAWN BY	DART AEROS HAWKESBURY, ON	
CHECKED	APPROVED	DRAWING NO.	REV. E
u'	land	D2282	SHEET 2 OF 2
DATE		TITLE	SCALE
05.06.07		HANDLE TUBES	1:1



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WELD ASSEMBLY PER DART QSI 004

Dart Aerospace Ltd

W/O:			WC	RK ORDER CHANG	ES					
DATE	STEP		OCEDURE CHAI	NGE	By Date Qty Chie			oval Eng / Mgr Approval QC Inspector		
Part No):	PΔR #·	Fault Cate	lory:	NCP: Ves	No DOA:	Date			
			n: PAR #: Fault Category:							
NCR:			WORK ORDE	R NON-CONFORMA	NCE (NCR)				
DATE	0750	Description of NC	Corrective Action Section		on B	Verification	Approval	Annual		
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	Approval QC Inspector		
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